Garland U.S. Range

Service Manual

Garland GT Series
US Range UT Series

Heavy Duty Gas
Counter Equipment

FOR YOUR SAFETY

DO NOT store or use gasoline or other flammable vapors or liquids in the vicinity of this or any other appliance

WARNING

Improper installation, adjustment, alteration, service or maintenance can cause property damage, injury, or death. Read the installation, operating and maintenance instructions thoroughly before installing or servicing this equipment.

IMPORTANT

Please read all sections of this manual and retain for future reference.

This product has been certified as commercial cooking equipment and must be installed by professional personnel as specified.

Users are cautioned that maintenance and repairs must be performed by a Garland/US Range Authorized Service Agent using genuine Garland replacement parts. Garland/US Range will have no obligation with respect to any product that has been improperly installed, adjusted, operated or not maintained in accordance with national and local codes or installation instructions provided with the product, or any product that has its serial number defaced, obliterated or removed, or which has been modified or repaired using unauthorized parts or by unauthorized service agents. For a list of authorized service agents, please refer to the Garland web site at www.garland-group.com

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Manitowoc

Safety Requirements

WARNING

This product contains chemicals known to the state of California to cause cancer and/or birth defects or other reproductive harm. Installation and servicing of this product could expose you to airborne particles of glass wool/ceramic fibers. Inhalation of airborne particles of glass wool/ceramic fibers is known to the State of California to cause cancer. Operatin of this product could expose you to carbon monoxide if not adjusted properly. Inhalation of carbon monoxide is known to the State of California to cause birth defects or other reporductive harm.

WARNING

Before working on any appliance, Shut Off the gas supply at the main shut-off valve and electrical supply at the main power switch. On completion of any service work, test for gas leaks before returning the equipment into service.

IMPORTANT

Please read and follow all the instructions carefully as the manufacturer cannot be held responsible for any damage to property, persons caused by incorrect installation or operation of the equipment.

Your equipment must be installed and adjusted by a competent person in accordance with the law. Failure to install appliances correctly could lead to prosecution. It is in your own interest and that of safety to ensure that the law is complied with. Refer to **Garland/US Range** Installation And Operation Manual for further details.

Your **Garland/US Range** Authorized Service Agent (ASA) is well qualified to provide this service. Periodic inspections by your **Garland/US Range** ASA or qualified service company are recommended to check temperatures, burner adjustments and to ensure that moving parts are operative. Whenever possible avoid overheating idle equipment as this is the primary cause for increased service cost.

NOTE

This manual is written for the model(s) specified on the front cover. Unless specified, this manual should not be used for any other make or model of appliance.

Garland reserves the right to change product specifications without notices and accepts no liability for any inaccuracies, errors or ommissions contained herein.

Keep your working area free and clear.
Remember Safety First.

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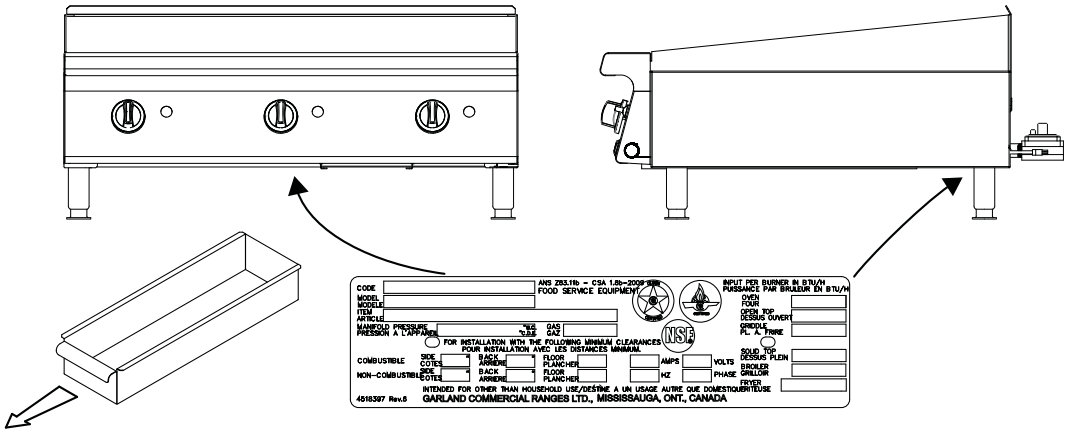
Rating Plate, Serial Number Information

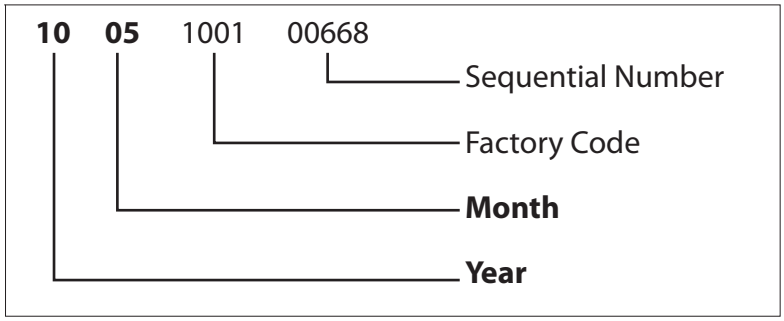
Rating Plate

The rating plate is affixed to a bracket mounted at the rear of the unit, and visible from the front. The grease drawer may need to be removed to view the rating plate.



Serial Number (Year/Month Information)

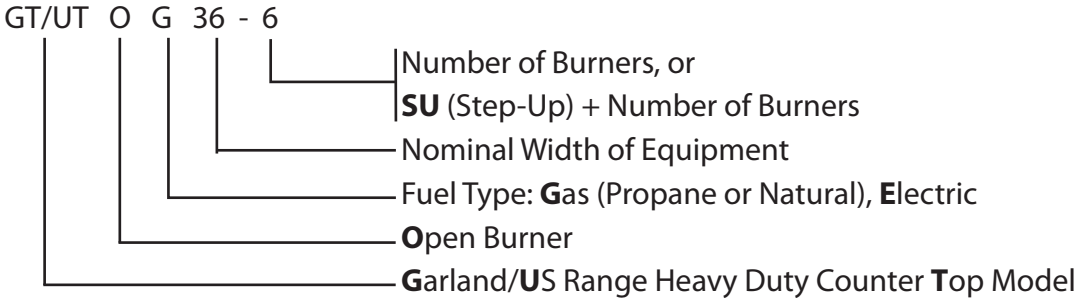
From June 2004 to Present, the Serial Number is 13 Digits Long.



Model Code Information

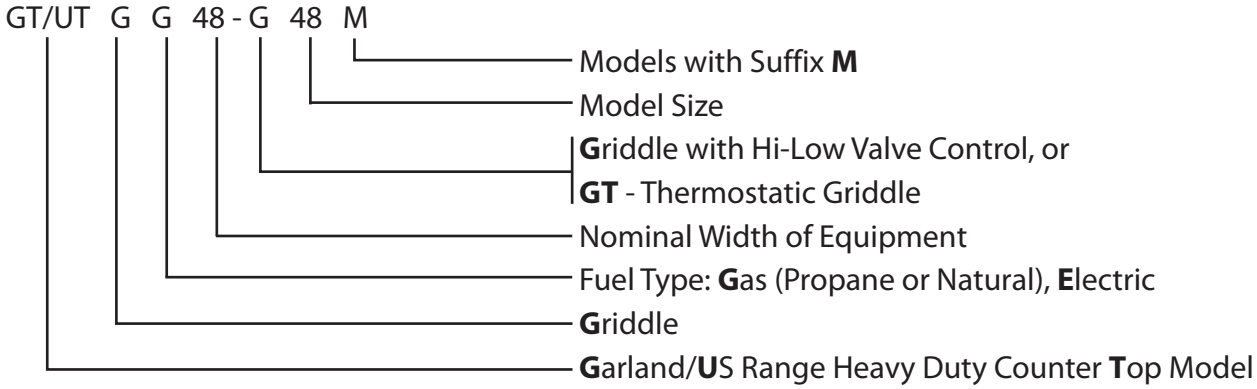
Open Top Models:

- GTOG__-_ / UTOG__-_ Open Top Model
- GTOG__-SU_ / UTOG__-SU_ Open Top Step-Up Model


GT/UT O G 36 - 6
Number of Burners, or
SU (Step-Up) + Number of Burners
Nominal Width of Equipment
Fuel Type: **G**as (Propane or Natural), **E**lectric
Open Burner
Garland/**U**S Range Heavy Duty Counter **T**op Model

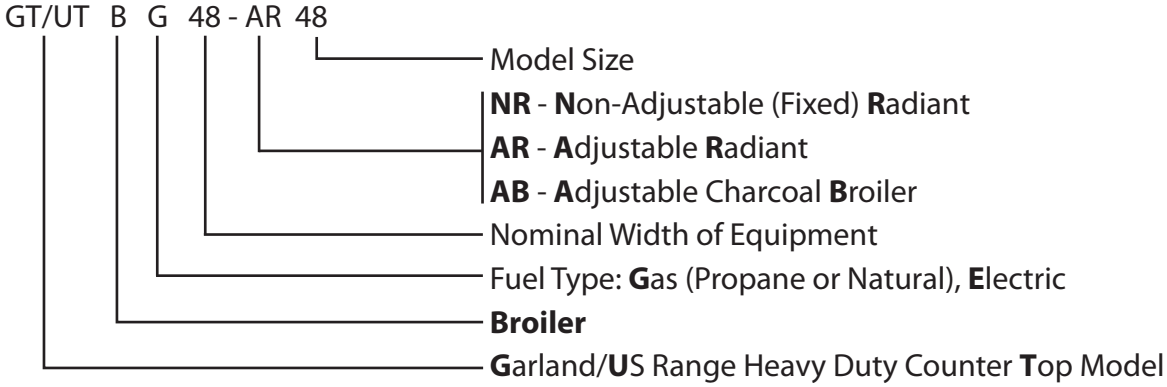
Griddle Models:

- GTGG__-G__ / UTGG__-G__ Valve-Controlled Griddle Model *(out-of-production)*
- GTGG__-G__M / UTGG__-G__M Valve-Controlled Griddle Model with Suffix M
- GTGG__-GT__ / UTGG__-GT__ Thermostat-Controlled Griddle Model *(out-of-production)*
- GTGG__-GT__M / UTGG__-GT__M Thermostat-Controlled Griddle Model with Suffix M


GT/UT G G 48 - G 48 M
Models with Suffix **M**
Model Size
Griddle with Hi-Low Valve Control, or
GT - Thermostatic Griddle
Nominal Width of Equipment
Fuel Type: **G**as (Propane or Natural), **E**lectric
Griddle
Garland/**U**S Range Heavy Duty Counter **T**op Model

Broiler Models:

- GTBG__-NR__ / UTBG__-NR__ Non-Adjustable (Fixed) Radiant Broiler Model
- GTBG__-AR__ / UTBG__-AR__ Adjustable Radiant Broiler Model
- GTBG__-AB__ / UTBG__-AB__ Adjustable Charcoal Broiler Model


GT/UT B G 48 - AR 48
Model Size
NR - **N**on-Adjustable (Fixed) **R**adiant
AR - **A**djustable **R**adiant
AB - **A**djustable Charcoal **B**roiler
Nominal Width of Equipment
Fuel Type: **G**as (Propane or Natural), **E**lectric
Broiler
Garland/**U**S Range Heavy Duty Counter **T**op Model

Technical Data

Open Top Burner Models

Model Information

Garland Models	US Range Models	Model Information
GTOG12-2	UTOG12-2	Gas, Two Open Burners, 12"Wide
GTOG24-4	UTOG24-4	Gas, Four Open Burners, 24"Wide
GTOG36-6	UTOG36-6	Gas, Six Open Burners, 36"Wide
GTOG48-8	UTOG48-8	Gas, Eight Open Burners, 48"Wide

Line Ratings

Garland	US Range	Natural Gas @ 4.5"WC Manifold Pressure		L. Propane Gas @ 10"WC Manifold Pressure	
Models	Models	BTU/h	Injectors	BTU/h	Injectors
GTOG12-2	UTOG12-2	60,000	#36	52,000	#53
GTOG24-4	UTOG24-4	120,000	#36	104,000	#53
GTOG36-6	UTOG36-6	180,000	#36	156,000	#53
GTOG48-8	UTOG48-8	240,000	#36	208,000	#53

For use with Natural or Propane gas only.
Gas input ratings shown for installation up to 2000 ft (610m) above sea level.

Supply Operating Pressure

Natural Gas		Propane Gas	
"WC	MBar	"WC	MBar
7	17.5	11	27.5

GTOG24-4 Shown

Technical Data

Model Information

Garland Models	US Range Models	Model Information
GTOG24-SU4	UTOG24-SU4	Gas, Four Open Burners Step Up, 24"Wide
GTOG36-SU6	UTOG36-SU6	Gas, Six Open Burners Step Up, 36"Wide
GTOG48-SU8	UTOG48-SU8	Gas, Eight Open Burners Step Up, 48"Wide

Line Ratings

Garland	US Range	Natural Gas @ 4.5"WC Manifold Pressure		L. Propane Gas @ 10"WC Manifold Pressure	
Models	Models	BTU/h	Injectors	BTU/h	Injectors
GTOG24-SU4	UTOG24-SU4	120,000	#36	108,000	#1.6mm
GTOG36-SU6	UTOG36-SU6	180,000	#36	162,000	#1.6mm
GTOG48-SU8	UTOG48-SU8	240,000	#36	216,000	#1.6mm

For use with Natural or Propane gas only.
Gas input ratings shown for installation up to 2000 ft (610m) above sea level.

Supply Operating Pressure

Natural Gas		Propane Gas	
"WC	MBar	"WC	MBar
7	17.5	11	27.5

GTOG24-SU4 Shown

Technical Data

Valve Controlled Griddle Models

Model Information

Garland Models	US Range Models	Model Information
GTGG24-G24	UTGG24-G24	Gas, Valve Controlled Griddle, 24"Wide
GTGG36-G36	UTGG36-G36	Gas, Valve Controlled Griddle, 36"Wide
GTGG48-G48	UTGG48-G48	Gas, Valve Controlled Griddle, 48"Wide
GTGG60-G60	UTGG60-G60	Gas, Valve Controlled Griddle, 60"Wide
GTGG72-G72	UTGG72-G72	Gas, Valve Controlled Griddle, 72"Wide

Line Ratings

Garland	US Range	Natural Gas @ 4.5"WC Manifold Pressure		L. Propane Gas @ 10"WC Manifold Pressure	
Models	Models	BTU/h	Injectors	BTU/h	Injectors
GTGG24-G24	UTGG24-G24	52,000	#37	52,000	#53
GTGG36-G36	UTGG36-G36	78,000	#37	78,000	#53
GTGG48-G48	UTGG48-G48	104,000	#37	104,000	#53
GTGG60-G60	UTGG60-G60	130,000	#37	130,000	#53
GTGG72-G72	UTGG72-G72	156,000	#37	156,000	#53

For use with Natural or Propane gas only.
Gas input ratings shown for installation up to 2000 ft (610m) above sea level.

Supply Operating Pressure

Natural Gas		Propane Gas	
"WC	MBar	"WC	MBar
7	17.5	11	27.5

GTGG36-G36 Shown

Technical Data

Model Information

Garland Models	US Range Models	Model Information
GTGG24-G24M	UTGG24-G24M	Gas, Valve Controlled Griddle, 24"Wide
GTGG36-G36M	UTGG36-G36M	Gas, Valve Controlled Griddle, 36"Wide
GTGG48-G48M	UTGG48-G48M	Gas, Valve Controlled Griddle, 48"Wide
GTGG60-G60M	UTGG60-G60M	Gas, Valve Controlled Griddle, 60"Wide
GTGG72-G72M	UTGG72-G72M	Gas, Valve Controlled Griddle, 72"Wide

Line Ratings

Garland	US Range	Natural Gas @ 4.5"WC Manifold Pressure		L. Propane Gas @ 10"WC Manifold Pressure	
Models	Models	BTU/h	Injectors	BTU/h	Injectors
GTGG24-G24M	UTGG24-G24M	54,000	#35	54,000	#52
GTGG36-G36M	UTGG36-G36M	81,000	#35	81,000	#52
GTGG48-G48M	UTGG48-G48M	108,000	#35	108,000	#52
GTGG60-G60M	UTGG60-G60M	135,000	#35	135,000	#52
GTGG72-G72M	UTGG72-G72M	162,000	#35	162,000	#52

For use with Natural or Propane gas only.
Gas input ratings shown for installation up to 2000 ft (610m) above sea level.

Supply Operating Pressure

Natural Gas		Propane Gas	
"WC	MBar	"WC	MBar
7	17.5	11	27.5

GTGG36-G36M Shown

Technical Data

Model Information

Garland Models	US Range Models	Model Information
GTGG24-GT24	UTGG24-GT24	Gas, Thermostatically Controlled Griddle, 24"Wide
GTGG36-GT36	UTGG36-GT36	Gas, Thermostatically Controlled Griddle, 36"Wide
GTGG48-GT48	UTGG48-GT48	Gas, Thermostatically Controlled Griddle, 48"Wide
GTGG60-GT60	UTGG60-GT60	Gas, Thermostatically Controlled Griddle, 60"Wide
GTGG72-GT72	UTGG72-GT72	Gas, Thermostatically Controlled Griddle, 72"Wide

Line Ratings

Garland	US Range	Natural Gas @ 4.5"WC Manifold Pressure		L. Propane Gas @ 10"WC Manifold Pressure	
Models	Models	BTU/h	Injectors#	BTU/h	Injectors#
GTGG24-GT24	UTGG24-GT24	64,000	#36	64,000	#51
GTGG36-GT36	UTGG36-GT36	96,000	#36	96,000	#51
GTGG48-GT48	UTGG48-GT48	128,000	#36	128,000	#51
GTGG60-GT60	UTGG60-GT60	160,000	#36	160,000	#51
GTGG72-GT72	UTGG72-GT72	192,000	#36	192,000	#51

For use with Natural or Propane gas only.
Gas input ratings shown for installation up to 2000 ft (610m) above sea level.

Supply Operating Pressure

Natural Gas		Propane Gas	
"WC	MBar	"WC	MBar
7	17.5	11	27.5

GTGG36-GT36 Shown

Technical Data

Model Information

Garland Models	US Range Models	Model Information
GTGG24-GT24M	UTGG24-GT24M	Gas, Thermostatically Controlled Griddle, 24"Wide
GTGG36-GT36M	UTGG36-GT36M	Gas, Thermostatically Controlled Griddle, 36"Wide
GTGG48-GT48M	UTGG48-GT48M	Gas, Thermostatically Controlled Griddle, 48"Wide
GTGG60-GT60M	UTGG60-GT60M	Gas, Thermostatically Controlled Griddle, 60"Wide
GTGG72-GT72M	UTGG72-GT72M	Gas, Thermostatically Controlled Griddle, 72"Wide

Line Ratings

Garland	US Range	Natural Gas @ 4.5"WC Manifold Pressure		L. Propane Gas @ 10"WC Manifold Pressure	
Models	Models	BTU/h	Injectors#	BTU/h	Injectors#
GTGG24-GT24M	UTGG24-GT24M	56,000	#33	56,000	#52
GTGG36-GT36M	UTGG36-GT36M	84,000	#33	84,000	#52
GTGG48-GT48M	UTGG48-GT48M	112,000	#33	112,000	#52
GTGG60-GT60M	UTGG60-GT60M	140,000	#33	140,000	#52
GTGG72-GT72M	UTGG72-GT72M	168,000	#33	168,000	#52

For use with Natural or Propane gas only.
Gas input ratings shown for installation up to 2000 ft (610m) above sea level.

Supply Operating Pressure

Natural Gas		Propane Gas	
"WC	MBar	"WC	MBar
7	17.5	11	27.5

GTGG36-GT36M Shown

Technical Data

Model Information

Garland Models	US Range Models	Model Information
GTBG24-NR24	UTBG24-NR24	Gas Broiler, Non-Adjustable Grates and Cast Iron Radiant
GTBG36-NR36	UTBG36-NR36	Gas Broiler, Non-Adjustable Grates and Cast Iron Radiant
GTBG48-NR48	UTBG48-NR48	Gas Broiler, Non-Adjustable Grates and Cast Iron Radiant
GTBG60-NR60	UTBG60-NR60	Gas Broiler, Non-Adjustable Grates and Cast Iron Radiant

Line Ratings

Garland	US Range	Natural Gas @ 4.5"WC Manifold Pressure		L. Propane Gas @ 10"WC Manifold Pressure	
Models	Models	BTU/h	Injectors#	BTU/h	Injectors#
GTBG24-NR24	UTBG24-NR24	72,000	#45	72,000	#1.3mm
GTBG36-NR36	UTBG36-NR36	108,000	#45	108,000	#1.3mm
GTBG48-NR48	UTBG48-NR48	144,000	#45	144,000	#1.3mm
GTBG60-NR60	UTBG60-NR60	180,000	#45	180,000	#1.3mm

For use with Natural or Propane gas only.
Gas input ratings shown for installation up to 2000 ft (610m) above sea level.

Supply Operating Pressure

Natural Gas		Propane Gas	
"WC	MBar	"WC	MBar
7	17.5	11	27.5

GTBG24-NR24 Shown

Technical Data

Model Information

Garland Models	US Range Models	Model Information
GTBG24-AR24	UTBG24-AR24	Gas, Broiler W/Adjustable Grates and Cast Iron Radiant
GTBG36-AR36	UTBG36-AR36	Gas, Broiler W/Adjustable Grates and Cast Iron Radiant
GTBG48-AR48	UTBG48-AR48	Gas, Broiler W/Adjustable Grates and Cast Iron Radiant
GTBG60-AR60	UTBG60-AR60	Gas, Broiler W/Adjustable Grates and Cast Iron Radiant

Line Ratings

Garland	US Range	Natural Gas @ 4.5"WC Manifold Pressure		L. Propane Gas @ 10"WC Manifold Pressure	
Models	Models	BTU/h	Injectors#	BTU/h	Injectors#
GTBG24-AR24	UTBG24-AR24	72,000	#45	72,000	#1.3mm
GTBG36-AR36	UTBG36-AR36	108,000	#45	108,000	#1.3mm
GTBG48-AR48	UTBG48-AR48	144,000	#45	144,000	#1.3mm
GTBG60-AR60	UTBG60-AR60	180,000	#45	180,000	#1.3mm

For use with Natural or Propane gas only.
Gas input ratings shown for installation up to 2000 ft (610m) above sea level.

Supply Operating Pressure

Natural Gas		Propane Gas	
"WC	MBar	"WC	MBar
7	17.5	11	27.5

GTBG24-AR24 Shown

Technical Data

Model Information

Garland Models	US Range Models	Model Information
GTBG24-AB24	UTBG24-AB24	Gas,Broiler W/Adjustable Grates and Ceramic Coals, 24"Wide
GTBG36-AB36	UTBG36-AB36	Gas,Broiler W/Adjustable Grates and Ceramic Coals, 36"Wide
GTBG48-AB48	UTBG48-AB48	Gas,Broiler W/Adjustable Grates and Ceramic Coals, 48"Wide
GTBG60-AB60	UTBG60-AB60	Gas,Broiler W/Adjustable Grates and Ceramic Coals, 60"Wide

Line Ratings

Garland	US Range	Natural Gas @ 4.5"WC Manifold Pressure		L. Propane Gas @ 10"WC Manifold Pressure	
Models	Models	BTU/h	Injectors#	BTU/h	Injectors#
GTBG24-AB24	UTBG24-AB24	60,000	#36	60,000	#51
GTBG36-AB36	UTBG36-AB36	90,000	#36	90,000	#51
GTBG48-AB48	UTBG48-AB48	120,000	#36	120,000	#51
GTBG60-AB60	UTBG60-AB60	150,000	#36	150,000	#51

For use with Natural or Propane gas only.
Gas input ratings shown for installation up to 2000 ft (610m) above sea level.

Supply Operating Pressure

Natural Gas		Propane Gas	
"WC	MBar	"WC	MBar
7	17.5	11	27.5

GTBG24-AB24 Shown

General Pilot Procedures

Lighting Standing Pilots - All Models

After the appliance has been installed by a licensed gas trades-person and all connections, pilot lights and controls have been inspected for proper operation. All gas appliances that use standing pilot systems are generally assumed to be operating with the pilot on continuously. The appliances should not be restarted except in the event of a gas service interruption to the facility.

If a pilot flame does go out, here are the basic steps to check before you re-light the pilot:

1. Check that all gas lines are in place and secured and there is no accumulation of gas inside the unit.
2. Ensure the main shut off valve is in the off position.
3. Turn off all individual burner valves.
4. Turn on or open the main shut off valve to the appliance.
5. Follow the pilot lighting procedure applicable to your model. The pilot should ignite within a few attempts. You will be able to see the pilot flame on a hotplate under the protective pilot shield cast into the burner top grate. Pilot flames on griddles and broilers can be viewed through observation holes in the stainless steel front panels.
6. If you do not have a pilot flame established fairly quickly and begin to smell gas, shut off the main valve and wait five minutes to let the gas build-up escape.
7. Only once the pilot flame has been established should you turn on the burner control. When the burner control is on it allows gas flow to the burner. if there is no pilot flame it will allow gas to build up and cause possible delayed ignition, which could result in an explosion.

Open Top Burner Models

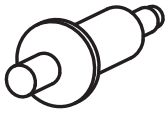
Pilots are easily accessible. Make sure the individual burner valve is in the off position, then use an open flame device, match, or BBQ lighter to ignite.

Broilers Models

Pilots are easily accessible. Make sure the individual burner valve is in the off position, then use an open flame device, match, or BBQ lighter to ignite.

Griddles with Valve Controls

- Make sure the individual valve control is in the off position.
- Use the piezo spark button(s), or electric spark if your model has this option, to ignite the pilot.



- Once the pilots are lit you may now turn your valve control to the high or low flame setting.
- To shut down the main burner turn the valve to off position.

General Pilot Procedures (continued)

Griddles with SIT Thermostats

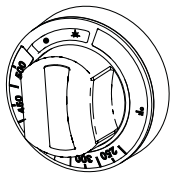


Figure 1

1. Turn thermostat control knob to the "★" (Figure 1) position. Then push in to engage the flow of gas through the safety device to the pilot.
2. While holding the knob in, light pilot by pressing the red piezo lighter button or the black igniter button if your model has the electric ignition option.
3. Continue to hold the knob in for 15 seconds after ignition, then release. Pilot should remain lit.
4. If the pilot burner fails to light or does not stay lit, wait 5 minutes and repeat steps 1 to 3.
5. Turn the thermostat knob to the desired cooking temperature.
6. To shut down the main burner, turn the control knob to the "★" position.

Griddles with GS Thermostats

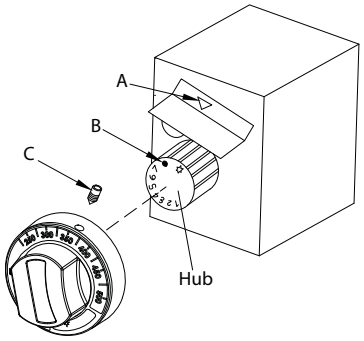
1. Ensure the individual on-off valve is in the off position.
2. Use the piezo, or electric spark if your model has this option, button(s) to ignite the pilot.
3. Once the pilot is lit, turn the thermostat knob to the desired cooking temperature.
4. To shut down, turn individual on-off valves to the off position.

Shutdown Procedure

To shutdown, turn all main burner valves to OFF position. If the appliance is to be shut down for a extended period of time, close the pilot valves, (gum valve) by turning their set screws **fully** clockwise.

Shutdown Procedure on Griddles with SIT Thermostats

The Garland/US Range SIT thermostat control knob is configured to leave the pilot flame on continuously. The knob is designed with a tab which will not permit complete pilot shutdown. In order to shutdown the griddle pilot flame completely, you must perform Steps 1 to 3 below. **Note** There are no pilot valves (gum valve).



1. Turn griddle thermostat control knob to symbol "★" position and then loosen the knob set screw (C). Gently pull knob off.

2. With the knob removed, push-down and turn the hub until the symbol (•) (B) lines up with symbol ▽ (A). With the hub in the position shown, the gas should be off at the pilots and burners. There are no pilot valves (gum valve).

3. Finally, turn the manual valve on the main gas supply to the OFF position.

▽ ★	Pilot Flame On
▽ ●	Complete Shutdown

Gas Pressure Regulator

Rear Gas Pressure Regulator Connection Options

- **Pipe size**: 3/4" (19.05mm) NPT for all models.

Ther are two options to connent a Gas Pressure Regulator, as shown in Figure 2 and Figure 3 below. Refer to Installation and Operation Manual for further details

Figure 2:

Gas pressure regulator connection is designed to flush-mount.

Note: when installing as a flush mount gas pressure regulator connection, (to allow for equipment installation against a noncombustible wall), a certified flexible gas hose and quick disconnect assembly is required to allow the unit to be moved in the event an adjustment of the gas pressure regulator is required.

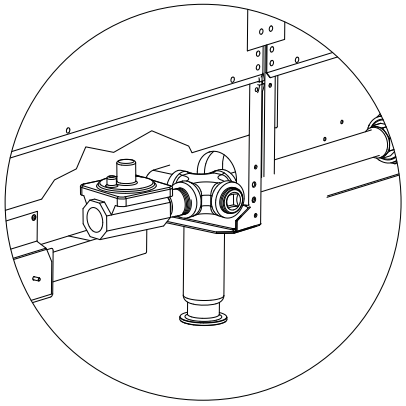


Figure 2

Figure 3:

Gas pressure regulator connection is designed straight through.

Garland recommends the use of certified flexible gas hose and quick disconnect assembly to allow the unit to be moved in the event an adjustment of the gas pressure regulator is required.

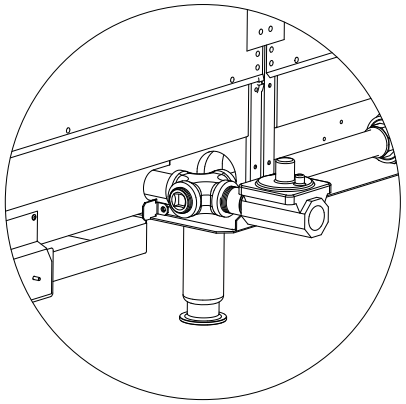
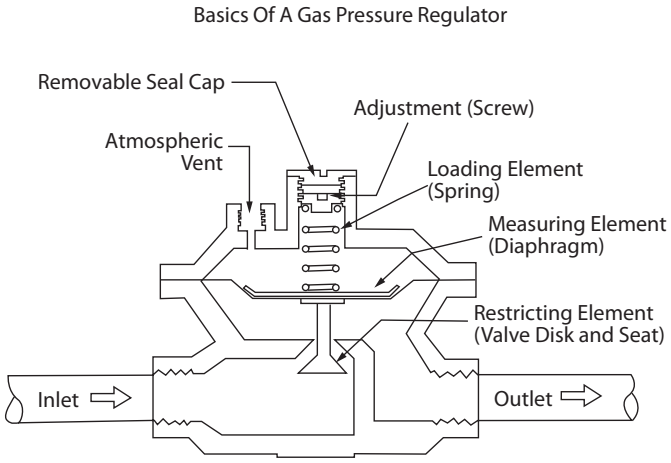


Figure 3

Purpose of gas pressure regulator



Gas pressure regulators have two main purposes, to reduce supply main pressure to safe operating pressures of connected appliances and to maintain constant downstream pressure, regardless of changes in the gas flow or upstream pressure variations.

Note: Gas service suppliers usually supply gas pressure higher than the safe operating pressures of connected appliances.

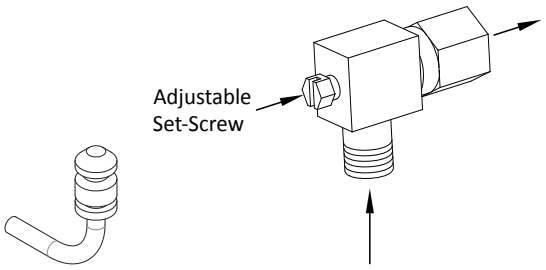
If an appliance receives too much fuel, it will over-fire. If it receives too little fuel, it will under-fire. It will produce too much or too little heat. Combustion characteristics could change resulting in carbon monoxide generation. The appliance may not work properly or efficiently.

Note: Always refer to the rating plate of appliance for actual manifold pressure required.

Open Top Burners Adjustments

Pilot Adjustment Valves

- Also known as gum valves (Figure 16).
- Available in single or double.
- Adjustable with a set-screw using a straight blade pocket screwdriver.
- Turn set-screw counter-clockwise to increase flow; turn set-screw clockwise to decrease flow.
- Precisely adjust the pilot flame to a slight yellow tip to provide maximum performance.



Pilot Tip **Figure 16**

Pilot Adjustment Valves Location

- All pilots adjustment valves are located on the manifold, behind the front panel (Figure 17).
- To remove the front panel, first remove the knobs with set screws. Then release the four (4) screws holding the panel and remove panel.

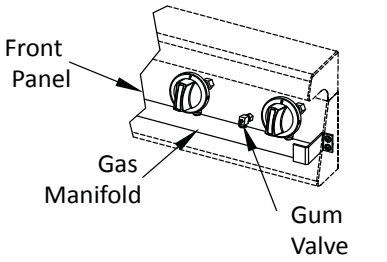


Figure 17

Burner Gas / Air Shutter Adjustment

Variations in field conditions, and/or rough handling of the equipment in transit may result in the need for adjustment of the primary air to the burners. The following steps will show you how to provide a sharp blue flame at the full rate (open valve fully for the maximum gas flow).

1. On the burner locate the aeration shutter (Figure 6).
2. Loosen the fixing screw so that the aeration shutter turns freely.
3. Turn on the gas flow and ignite the burner.
4. Rotate the air shutter to obtain the 1/2" stable, sharp inner blue cones (Figure 7).

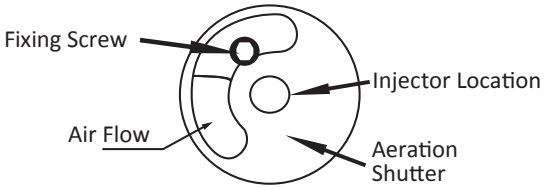


Figure 6

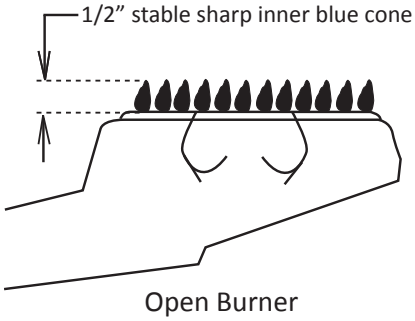
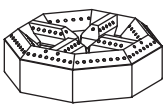


Figure 7

US Range and Garland Burner Heads:



US Range
Burner Head

Garland
Star Burner Head

Troubleshooting — Open Top Burners

WARNING

Inspection, testing and repair of equipment should be performed only by qualified service personnel. Certain procedures in this section require gas tests or measurements while gas is applied to the unit. Use extreme caution at all times. If test points are not easily accessible, disconnect main gas line, attach test equipment and reapply gas supply to continue the test.

Always confirm manifold gas pressure at all times.

PROBLEM	POSSIBLE CAUSE	SOLUTION
Burner Flame soft –lazy tip yellow	Not enough air mixing with gas	Open air shutter
Flames lift off burners	Too much air mixing with gas	Reduce air shutter opening
Flashes back in burner		
"Pop's" excessively when turned off		
Delayed ignition	Unit over-gassed fired	Adjust manifold pressure
	Incorrect injector	Check injector size
	Burner ports plugged	Clean burner ports
Pilot burner will not ignite	Pilot flame too small	Adjust pilot valve
	Draft in Kitchen	Determine cause
Flame lifts off pilot	Pilot over-gassed fired	Adjust pilot valve

Griddle Adjustments

Griddle Spark Igniter

Garland has two different igniter systems on the griddle units:

1. Push-button piezo igniter system
2. Electronic Spark igniter system

1. **Push-button Piezo igniter system** (Figure 8) consists of a small, spring-loaded hammer, which creates voltage when a button is pressed. 120V electric connection is NOT required; wires are needed to move the electricity to an electrode close to the pilot. Proper alignment is critical for better performance. Only one spark is generated per press of the button. When equipment installed above 8000 feet sea-level, lighters with piezo-electric ignition are no longer reliable.

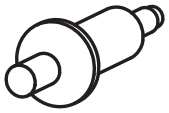


Figure 8

2. **Electronic Spark Igniter System** consists of an Electronic Spark Generator (ESG) box (Figure 10), a momentary switch (Figure 9), and electrical components, plus wires to discharge a spark across a gap between electrodes (spark gap). See below, section 2.3 ESG Technical Specification.

   When electrical voltage connection is required, refer to section ***Wiring Diagram***.

   2.1 Remove, Test, and Replace a Momentary Switch (MS)

   a. Ensure power cord is unplugged.
   b. Remove decorative dress nut off the momentary switch
   c. Remove knobs with set screws.
   d. Remove the four (4) screws from front panel and remove panel.
   e. **Griddle with SIT Thermostat**: On the **LEFT** hand side of the unit remove screw and the momentary switch side panel (Figure 9).

      Griddle with GS Thermostat: On the **RIGHT** hand side of the unit remove screw and the momentary switch side panel (not shown).
   f. Remove momentary switch nut and unplug rear terminal wires.
   g. Connect multi-tester probes on the momentary switch terminals. Continuity must be indicated when button is pressed, if not, replace switch.

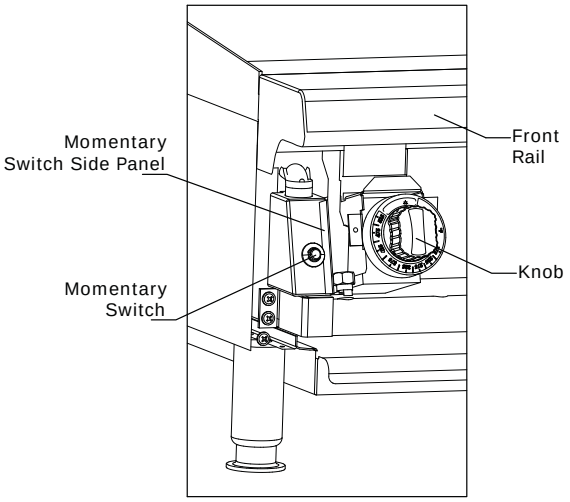


Figure 9. SIT Tstat and Momentary Switch

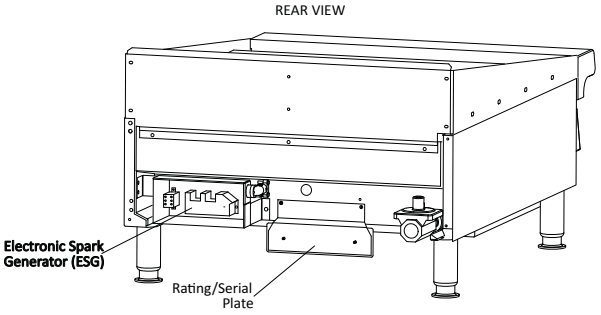


Figure 10

2.2 Removal and Replacement of Electronic Spark Generator (ESG);

a. Verify the rating plate voltage to ESG specification. See section 2.3 below.

b. Ensure power cord is unplugged.

c. Before removing ESG, check wires for continuity in case a wire is damaged. Refer to section Wiring diagrams.

d. Remove the ESG front box panel located at the back of the unit (Figure 10).

e. Unscrew the two screws at each side of the ESG unit, and unplug the terminal wires. Remove the ESG unit.

f. Replace ESG unit in reverse order.

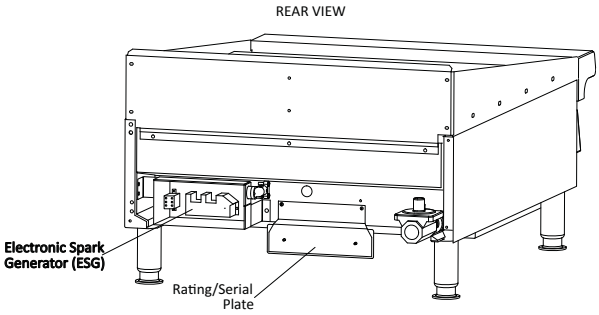
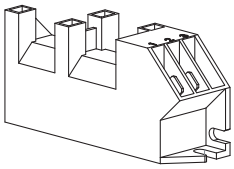


Figure 10

2.3 ESG Technical Specification



Electronic Spark Generator (ESG)

	Part # 4514749	Part # 4514750
Input Voltage	(1-2) 220-240 +10%,-15%	(1-2) 110-120 ±10%
Spark Type	Repetitive, 3Hz at 230v	Repetitive, 3Hz at 120v
Outlets	(a-d) 4	(a-d) 4
Main Frequency	50-60 Hz	50-60 Hz
Power Consumption	0.8VA MAX.	0.6VA MAX.
Spark Gap	4 X 4 mm (0.157″) MAX.	4 X 4 mm (0.157″) MAX.

High Tension Lead (HTL) & Insulation

The pilot HTL is exposed to high temperatures where they are located.

IMPORTANT

Keep the insulation in place.

Insulation should cover wire, connector, plus bottom of electrode as shown in Figure 11.

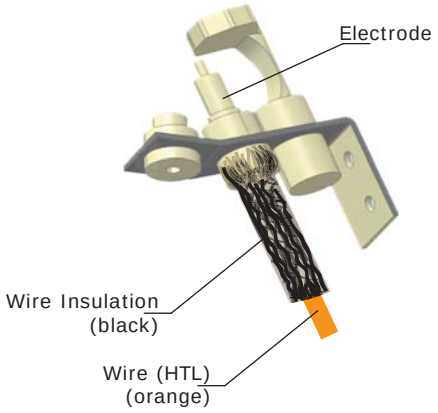


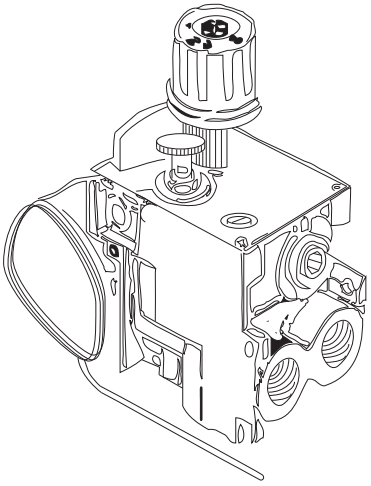
Figure 11.

Thermostatic Griddle Adjustments (SIT Control)

SIT Valve Control

Garland's Heavy Duty Counterline contains a gas control system enclosed in one component — the SIT Control. The griddle pilot safety system is an internal subcomponent of the control. This control (part#CK4528339) is modified to snap action. There is no Bypass on this control.

This control, although very similar to the mechanical controls found on Garland's current range and griddle models, has several major economical efficiencies that offer reliability advantages to the customer.



NOTE

1. Griddle SIT control - Temperature control range 175^{0}F - 525^{0}F (80^{0}C - 274^{0}C).
2. It is a safety valve, and thermostat in one assembly. The safety valve should not be removed from the body of the control for any reason.
3. Verify manifold pressure before replacing.
4. Familiar Open circuit, closed circuit, and drop out checks should be made if the internal safety valve is suspected to be at fault.
5. This control does not require any initial flame setting.
6. This control does not require internal calibration. (Some minor knob adjustments could be appropriate, but it would be rare.
7. If a SIT control component is suspected to be internally at fault, replace the control.

Installing a Thermocouple

A thermocouple nut should be started and turned all the way in by hand. An additional quarter turn with a small wrench will be sufficient to seat the lock washer and maintain adequate contact. Connection that is too loose or too tight of the thermocouple nut to the automatic pilot valve can prevent the thermocouple from activating the valve. Inspect the thermocouple lead visually to ensure there are no cracks or ruptures.

Testing the Magnet Assembly and Thermocouple Operation

Heating at the thermocouple tip by a pilot flame produces an electric potential for energizing the magnet that, in turn, holds open the main and pilot valves.

When the pilot is "out" or improperly adjusted, insufficient heat is applied to the thermocouple tip to produce adequate electrical generation that results in the control shutting itself off. If, while following the proper lighting procedures, the magnet cannot be made to "hold", inspect the pilot flame for proper size and adjustment (see pilot burner adjustment).

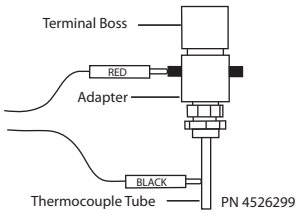
If the magnet will still not hold, perform the following tests: closed circuit test, open circuit test.

Griddle Adjustments — SIT Thermostat (continued)

Closed Circuit Test (To test magnet & thermostat as a complete unit)

To perform the closed circuit test, remove the thermocouple lead from the magnet contact.

Place an adapter in the magnet contact and turn the thermocouple into the adapter finger tight. Connect millivolt leads to the adapter and thermocouple lead as shown.



In the Sit Control, insert a metric M9 adapter in the magnet contact to complete the safety valve check as shown

1. Make sure the thermocouple is properly inserted into the pilot housing, and has no play. Also check gas tubing connection at the pilot and tighten if loose.
2. Re-light the pilot, and read the meter after the pilot has been burning for three minutes. If the pilot will not continue burning, depress and hold the temperature knob to manually open the SIT safety valve to check the thermocouple output for this closed circuit check. If insufficient (normal output for closed circuit is 8-14 millivolts), and under 7 millivolts, replace the thermocouple. If the millivolt reading is above 7 mV, and the safety magnet does not hold, replace the valve.
3. If the closed circuit mV reading is the same as the open circuit reading, the coil is electrically open, and the valve must be replaced.
4. Check for drop out time which should occur within 60 seconds and at approximately 2 mV since the pilot was out.
5. Re-light the pilot and turn on the main burner. As the griddle heats up, it is normal to see a slight decrease in millivolts.

Open Circuit Test

1. Disconnect the thermocouple from the safety valve.
2. Attach the thermocouple to the millivolt test instrument.
3. Heat the sensor end of the thermocouple at the pilot flame or similar flame characteristics, monitoring the millivolt meter
4. If the millivolt reading is below 18 millivolts, replace the thermocouple

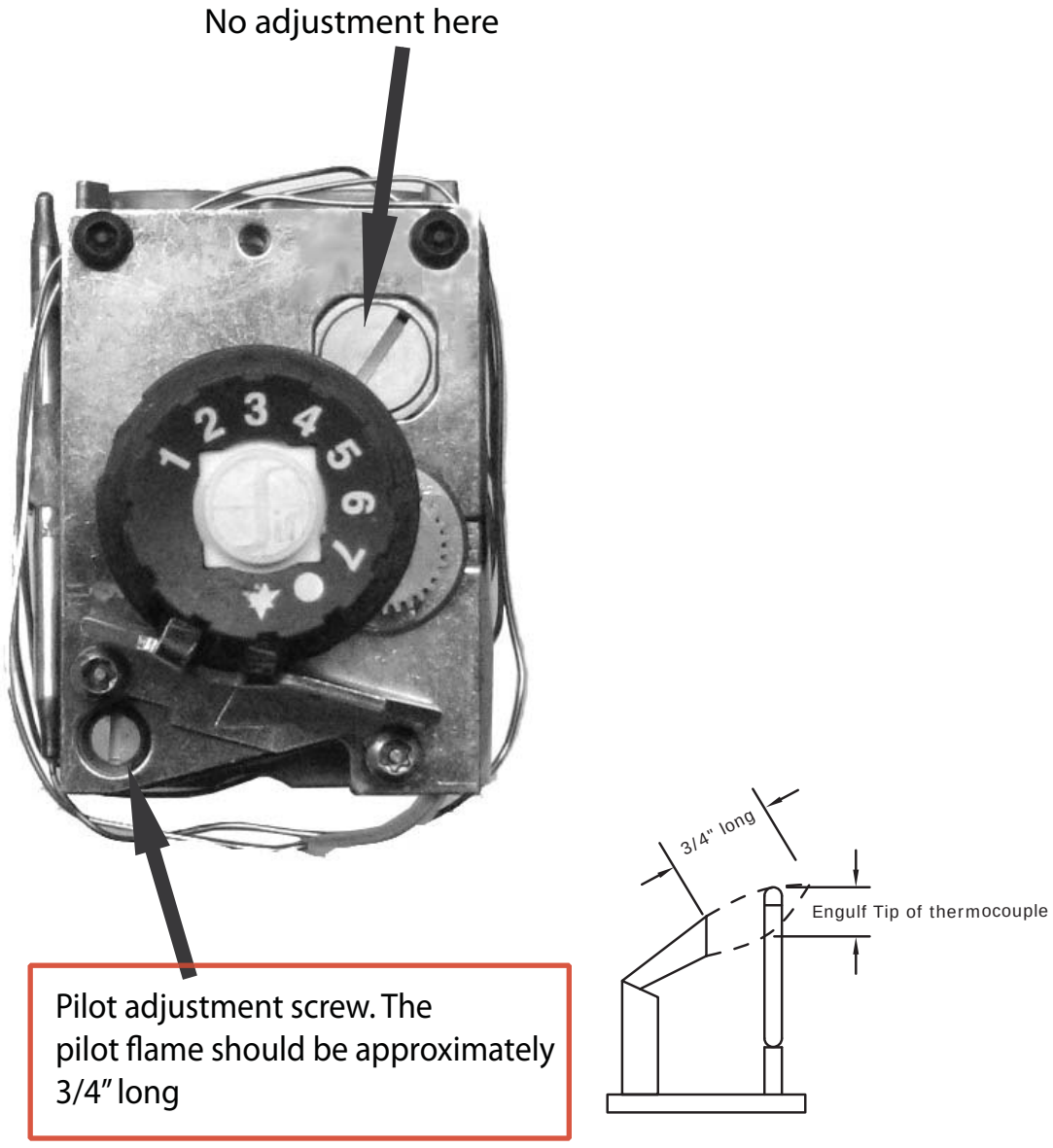
Note: The SIT thermocouple open circuit voltage will be approximately 18-28 millivolts

SIT Thermocouple		
mV	Closed Circuit	8-14
	Open Circuit	18-28
	Drop Out	2

Griddle Adjustments — SIT Thermostat (continued)

Thermostatic Griddle Pilot Adjustment

1. Adjustment with a screw located on the SIT control (refer to photo).
2. Turn the screw clockwise to reduce the gas flow.
3. Precisely adjust the pilot flame to a slight yellow tip to provide maximum performance. Flame must engulf only the tip of thermocouple.


No adjustment here
1 2 3 4 5 6 7
Pilot adjustment screw. The pilot flame should be approximately 3/4" long
3/4" long
Engulf Tip of thermocouple

Griddle Adjustments — SIT Thermostat (continued)

SIT Valve Calibration Instructions

These are **mandatory steps** for thermostat validation in the field. You MUST perform these steps before replacing. They confirm if the SIT griddle control is working as per specification or is failing.

Note:

- Griddle plate must be clear (without product).
- Ensure your temperature meter is accurate (surface probe or magnetic T-couple only).
- Calibration temperature = average of the flame ON and flame OFF/ temperature, (on+off)/2.

1	Check Manifold Pressure	4.5"W.C. Natural Gas; 10"W.C. Propane Gas
2	Inspect pilots and place thermocouple on plate (as shown figure 13)	Moisten the thermocouple with oil.

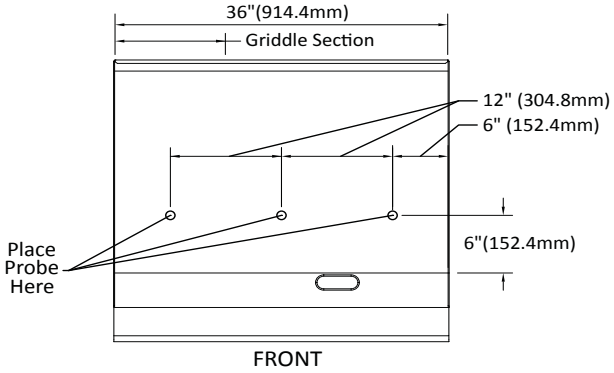


Figure 13. Griddle Top View - Data for Griddle with SIT thermostat.

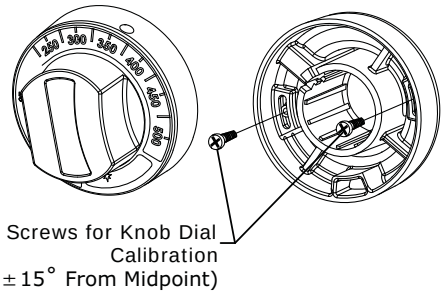


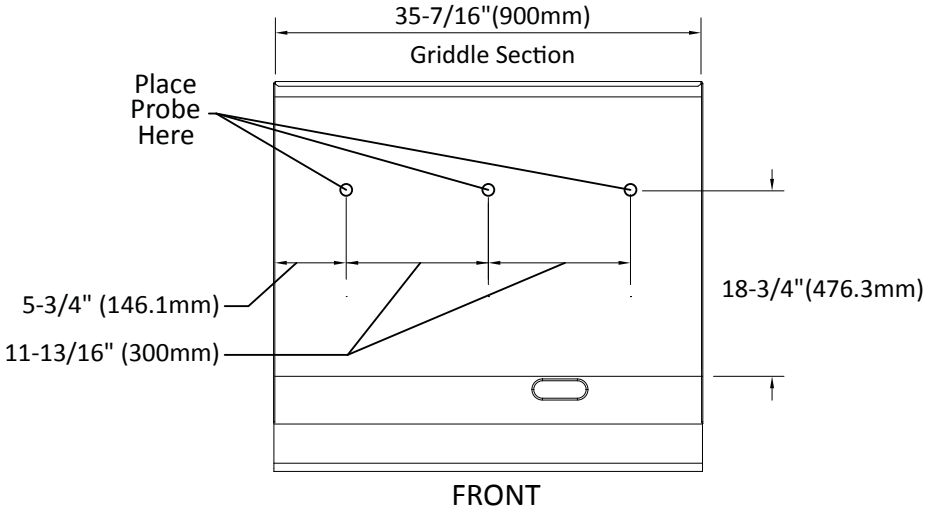
Figure 14.

3	Set Dial at 350^{0}F on all burners	Take dial to Max. and back down to 350^{0}F position on the dial insert.
4	Start Up	Do not take temperature readings for the first 30 minutes if the griddle was started from cold. Must be preheated and saturated.
5	Visual check	Pilot flame and ignition, burner flame.
	Note: Accepted Tolerance	Temperatures swing at 350^{0}F is ± 15^{0}F Average temperatures at 350^{0}F ± 10^{0}F.
6	Monitor Temperature	Read and record consecutively the lowest and highest temperature values for each control (approx. 15 minutes). Temperature must be within 350^{0}F ± 25^{0}F. The average of high and low values must be 350^{0}F ± 10^{0}F. If not, go to step 7.
7	Additional Calibration if not within accepted tolerance (Figure 14).	Rotate the dial in small increments until within tolerance and adjust dial following "Knob calibration instructions". Knob calibration can adjust set point by 30^{0}F (± 15^{0}F from midpoint setting).
8	Set Dial at 400^{0}F on all burners and confirm calibration on those corrected at step 7	Take dial to Max. and back down to 400^{0}F position on the dial insert. The average of high and low values must be 400^{0}F ± 20^{0}F.
9	Replacement	Change the control if low and high values exceed swing of 50^{0}F and/or average is not between 380^{0}F and 420^{0}F after Knob Calibration Procedure.

Thermostatic Griddle Adjustments (GS Control)

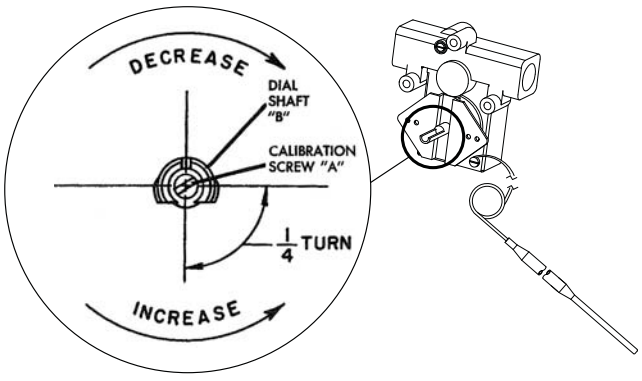
GS Thermostat Calibration Instructions

1. Use a test instrument with a special disc type thermocouple or a reliable surface type pyrometer.
   Note A drop of oil on the face of the disc will provide better contact with the griddle plate.
2. Set all griddle thermostats to 350 deg F. In order to stablize the griddle temperature, you must cycle the thermostats twice before taking a test reading.
3. Check the griddle temperature when the thermostat just cycles OFF by placing the thermocouple firmly on the griddle surface directly above the sensing bulb of the thermostat.



4. Take the reading and it should be between 335 deg F and 365 deg F. If the reading is outside of these limits, calibrate as follows:

   a. Carefully remove the dial without disturbing the shaft position.
   b. Hold the shaft steady and with a small flat screw driver, turn the calibration screw located inside the shaft clockwise to descrease temperature or anit-clockwise to increase temperature.
      Note: Each 1/4 turn of the screw will create a change of approximately 25 deg F.
   c. Replace the thermostat dial and repeat steps 1 through 3 to verify that a correct adjustment has been made.

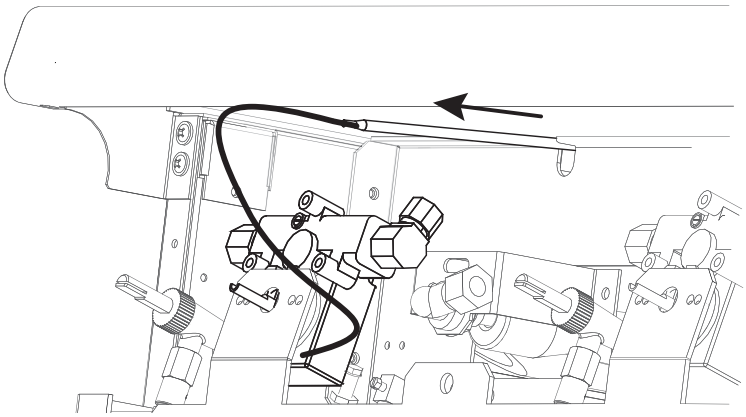


Griddle Adjustments — GS Thermostat (continued)

Replace a GS Thermostat

Note: It is not required to raise the griddle assembly for thermostat replacement.

1. Remove knobs from all valves and thermostats.
2. Un-install screws retaining the valve panel to unit and remove valve panel from unit.
3. Disconnect tubing connecting thermostat to on-off valve and to burner orifice fitting.
4. While grasping capillary line as close as possible to front edge of griddle plate, slide back the insulation sleeve.
5. Carefully pull outward on capillary and slide thermostat bulb out of clamp assembly on bottom of plate.



6. Remove the insulation sleeve from capillary.
7. Unfasten screws mounting thermostat to manifold and remove thermostat from unit.
8. Mount replacement thermostat to manifold with screws removed in Step 7.
9. Slide insulation sleeve removed in Step 6 onto capillary of new thermostat.
10. Place thermostat bulb through cut-out in front support/shield and into the V-opening of clamp assembly and push into clamp assembly until it comes to a stop.
11. Slide insulation sleeve along capillary line up to start of clamp assembly.
12. Re-install valve panel and knobs.

Griddle Adjustments — Hi/Low Valve

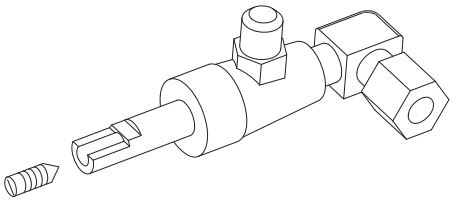
Griddles with Hi/Low Valves

The Hi/Low Gas Valves are located behind the knobs, connected to the manifold. Use a straight blade pocket screwdriver to adjust low setting higher or lower.

Reminder. Adjustments on valves are for the low flames setting only. See section "Adjuct Hi-Lo Valve" below.

Adjust a Hi-Lo Valve

Griddles equipped with Hi-Lo valves required a low flame setting. To adjust:



Adjustable Valve

1. Burner must be cold.
2. Ensure pilot flames are lit and adjusted.
3. Turn dial to "LO" position, then remove dial.
4. With a screwdriver, turn the small adjusting screw inside the valve stem and adjust to obtain the low cooking temperature desired, maintaining a stable flame covering the entire burner (minimum 3/16" (5mm) long flame).
5. Replace the dial and turn to "OFF" position.

Remove and replace a Hi/Low Valve

1. Remove knobs.
2. Remove the four (4) screws from front panel and remove panel.
3. Disconnect gas line and then unscrew valve from manifold.
4. Install new valve in reverse order.
5. Reconnect gas line.
6. Check for gas leaks.

Burner Gas / Air Shutter Adjustment

Variations in field conditions, and/or rough handling of the equipment in transit may result in the need for adjustment of the primary air to the burners. The following steps will show you how to provide a sharp blue flame at the full rate (open valve fully for the maximum gas flow).

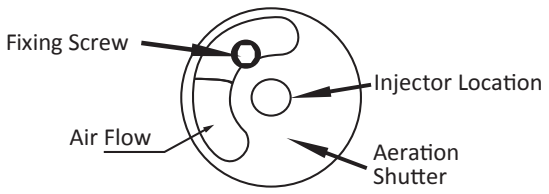
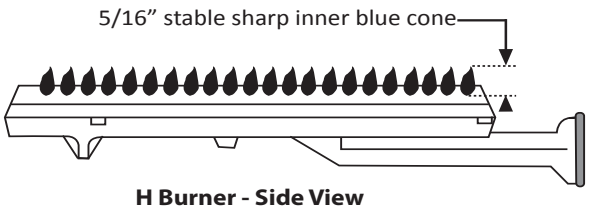


Figure 6

1. On the burner locate the aeration shutter (figure 6).
2. Loosen the fixing screw so that the aeration shutter turns freely.
3. Turn on the gas flow and ignite the burner.
4. Rotate the air shutter to obtain the 5/16" stable, sharp inner blue cones (figure 15).



H Burner - Side View

Figure 15

Troubleshooting — Griddles

WARNING

Inspection, testing and repair of equipment should be performed only by qualified service personnel. Certain procedures in this section require gas tests or measurements while gas is applied to the unit. Use extreme caution at all times. If test points are not easily accessible, disconnect main gas line, attach test equipment and reapply gas supply to continue the test.

Always confirm manifold gas pressure at all times.

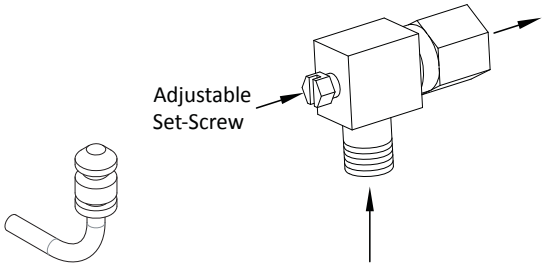
PROBLEM	POSSIBLE CAUSE	SOLUTION
Burner Flame soft –lazy tip yellow	Not enough air mixing with gas	Open air shutter
Flames lift off burners	Too much air mixing with gas	Reduce air shutter opening
Flashes back in burner		
"Pop's" excessively when turned off		
Griddle too hot or too cold	Thermostat out of Calibration (Thermostat Griddle)	Check Calibration temperature with actual readings. See calibration procedure.
	Hi/lo valve set wrong (Hi/Lo Valve Griddle)	Adjust hi/lo valve. Adjust on low setting only, burner cold. Lowest stable flame
Delayed ignition	Unit over-gassed fired	Adjust manifold pressure
	Incorrect injector	Check injector size
	Burner ports plugged	Clean burner ports
Pilot burner will not ignite	Pilot flame too small	Adjust pilot valve on manifold
	Draft in Kitchen	Determine cause
Flame lifts off pilot	Pilot over-gassed fired	Adjust pilot valve
Pilot Outage (SIT Control Models)	Bad thermocouple	Check actual mV open and closed circuits. See table below.

SIT Thermocouple		
mV	Closed Circuit	8-14
	Open Circuit	18-28
	Drop Out	2

Broiler Adjustments

Pilot Adjustment Valves

- Also known as gum valves (Figure 16).
- Available in single or double.
- Adjustable with a set-screw using a straight blade pocket screwdriver.
- Turn set-screw counter-clockwise to increase flow; turn set-screw clockwise to decrease flow.
- Precisely adjust the pilot flame to a slight yellow tip to provide maximum performance.



Pilot Tip **Figure 16**

Pilot Adjustment Valves Location

- All pilots adjustment valves are located on the manifold, behind the front panel (Figure 17).
- To remove the front panel, remove knobs with set screws. Then release the four (4) screws holding the panel and remove panel.

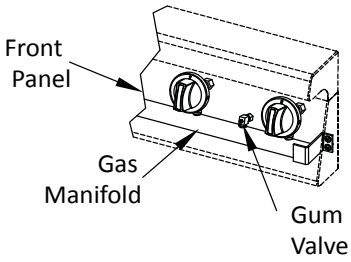
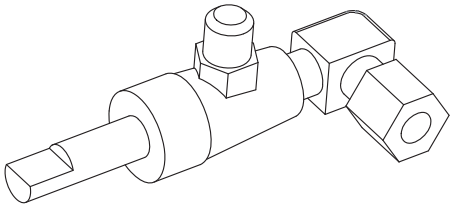


Figure 17

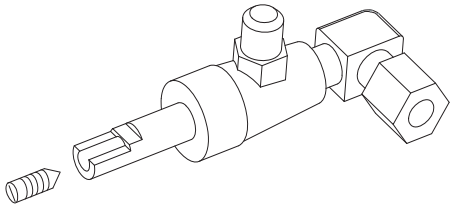
Gas Burner Control Valves

1. **Non-adjustable Burner Control Valve (Charcoal models only)**
   - Regulates the flow of gas to the burner.
   - Fixed and non-adjustable control.
   - Valves located behind the knobs, connected to the manifold.



Non-adjustable Valve

2. **Adjustable Hi/Low Burner Control Valve**
   - Regulates the flow of gas to the burner.
   - Use a straight blade pocket screwdriver to adjust low setting higher or lower.
   - Valves are located behind the knobs, connected to the manifold.
   - **Reminder: Adjustments on valves are for the low flames setting only.**



Adjustable Valve

To remove and replace a control valve:

1. Remove the knobs.
2. Remove the four (4) screws holding the front panel, and remove panel.
3. Disconnect gas line. Then unscrew valve from the manifold.
4. Install a new valve in reverse order.
5. Reconnect gas line.

Broiler Adjustments (continued)

Burner Gas / Air Shutter Adjustment

Variations in field conditions, and/or rough handling of the equipment in transit may result in the need for adjustment of the primary air to the burners. Follow the steps below to provide a sharp blue flame at the full rate (open valve fully for the maximum gas flow).

To adjust a burner air shutter:

1. Confirm manifold pressure matches rating plate.
2. Locate the aeration shutter on the burner.
   - For Charcoal Broiler Models, see Figure 6.
   - For Radiant Broiler Models, see Figure 18.
3. Loosen the fixing screw to allow the aeration shutter turn freely.
4. Turn on the gas flow and ignite the burner.
5. Rotate the air shutter until you obtain flame with 5/16" stable, sharp inner blue cones (Figure 15).
6. Tighten the fixing screw.

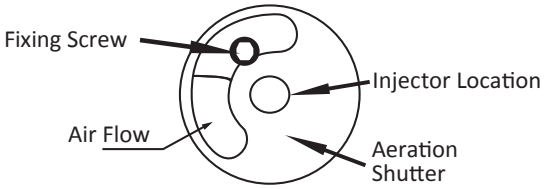


Figure 6. Charcoal Broiler Air Shutter.

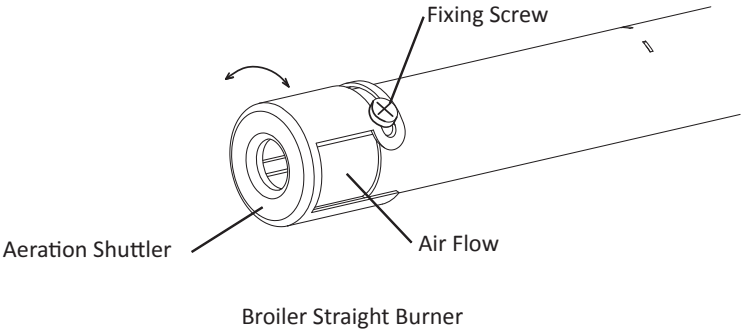
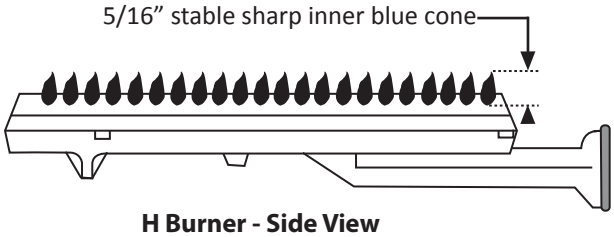


Figure 18. Radiant Broiler Air Shutter.



H Burner - Side View

Figure 15. H Burner shown as an example.

Troubleshooting — Broilers

WARNING

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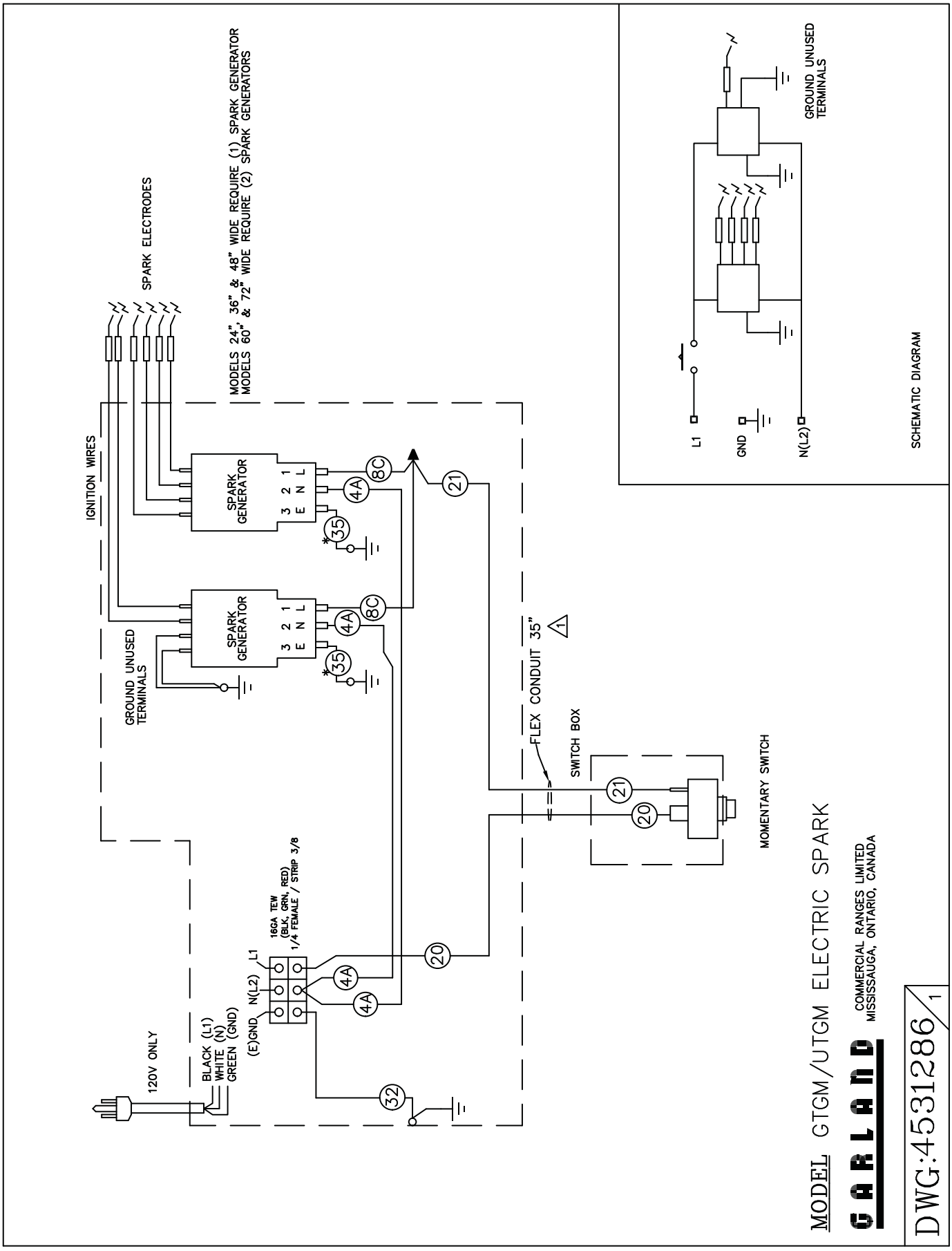
Always confirm manifold gas pressure at all times.

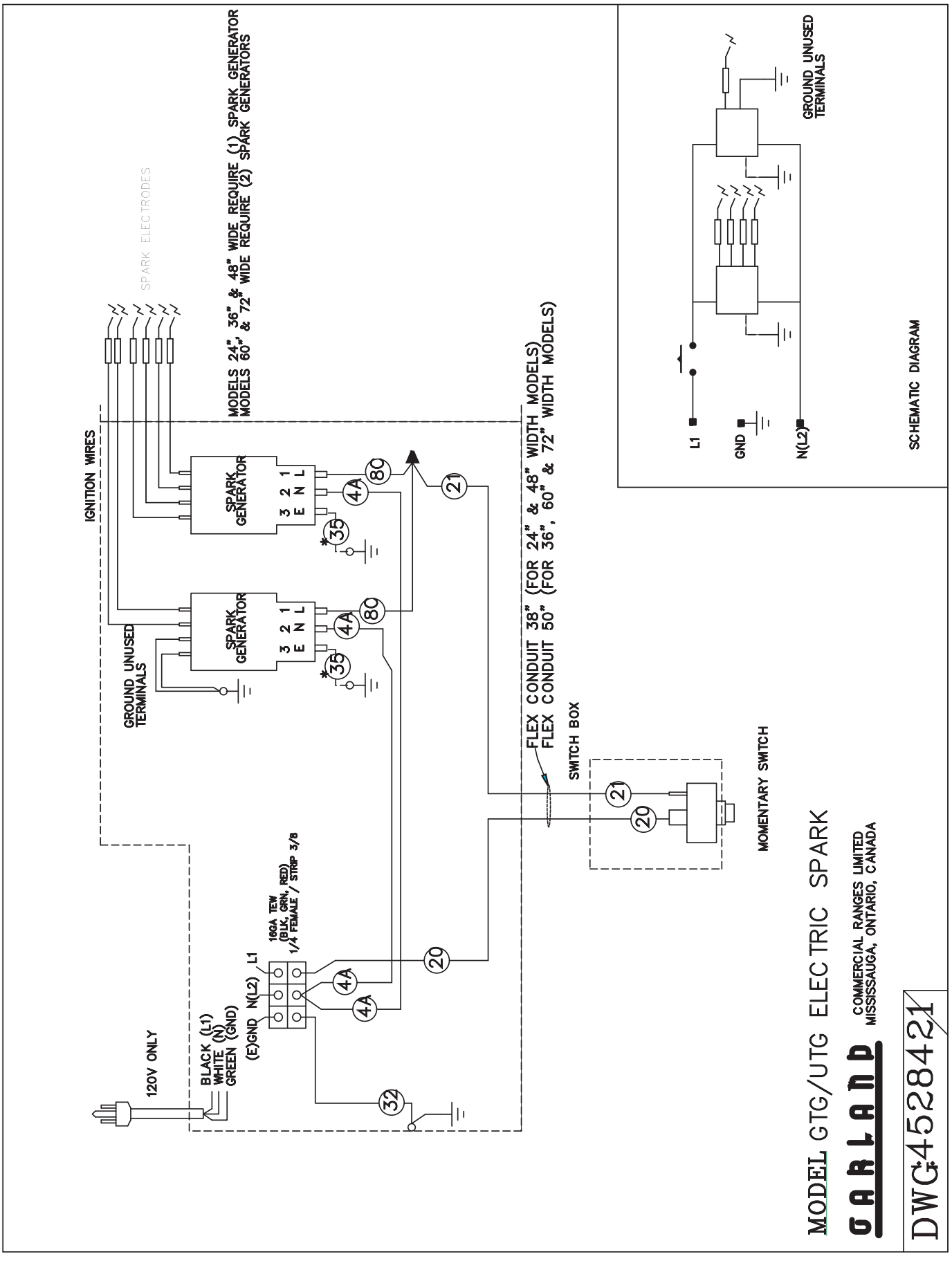
PROBLEM	POSSIBLE CAUSE	SOLUTION
Burner Flame soft –lazy tip yellow	Not enough air mixing with gas	Open air shutter
Flames lift off burners	Too much air mixing with gas	Reduce air shutter opening
Flashes back in burner		
"Pop's" excessively when turned off		
Delayed ignition	Unit over-gassed fired	Adjust manifold pressure
	Incorrect injector	Check injector size
	Burner ports plugged	Clean burner ports
Pilot burner will not ignite	Pilot flame too small	Adjust pilot valve
	Draft in Kitchen	Determine cause
Flame lifts off pilot	Pilot over-gassed fired	Adjust pilot valve
Griddle too hot or too cold	Hi/Lo valve set wrong (Broiler, Hi/Lo Valves Models)	Adjust hi/lo valve. Adjust on low setting only, burner cold. Lowest stable flame

Notes

Wiring Diagram (GTGG/UTGG__M Models Electric Spark)



Wiring Diagram (GTGG/UTGG Electric Spark)



Gas Conversion Kits (*from Natural to Propane*)

PART #	KIT COMPONENTS	BTU/HR PER BURNER	QTY
Open Tops and Step-Up Open Tops (Kit part# 4528882)			
M8-53	#53 Orifice – Open Top Burners (Hotplate Only) – Pro	26,000	8
M8-1.6MM	1.6Mm Orifice – Open Top Burners (Step Up Only) – Pro	27,000	8
4528897	Instructions Conversion Kit Hd Hotplate – Nat/Propane		1
4528891	Label – Conversion Ratings Hd Hotplates		1
4516405	Label - Conversion Declaration		1
2127500	3/4" Regulator Propane 10" W.C.		1
Hi/Low Griddle *model* **GTGG__-G__ (Kit Part# 4528884)**			
M8-53	#53 Orifice – Griddles (Hi-Lo Valve) – Pro	26,000	6
2200703	Pilot Orifice #23 Propane		6
4528898	Instructions Conversion Kit Hd Counter Griddles – Nat/Propane		1
4528893	Label – Conversion Ratings Hd Counter Griddles		1
4516405	Label - Conversion Declaration		1
2127500	3/4" Regulator Propane 10" W.C.		1
Hi/Low Griddle *model* **GTGG__-G__M (Kit Part# 4531366)**			
M8-53	#53 Orifice – Griddles (Hi-Lo Valve) – Pro	27,000	6
2200703	Pilot Orifice #23 Propane		6
4531371	Instructions Conversion Kit GTGGM Griddle, Nat/Propane		1
4516405	Label - Conversion Declaration		1
4531369	Label - Conversion Ratings, Propane		1
2127500	3/4" Regulator Propane 10" W.C.		1
Thermostatic Griddle *model* **GTGG__-GT__ (Kit Part# 4528886)**			
M8-51	#51 Orifice – Griddles (Tstat) – Pro	32,000	6
2200703	Pilot Orifice #23 Propane		6
4528898	Instructions Conversion Kit Hd Counter Griddles – Nat/Propane		1
4528893	Label – Conversion Ratings Hd Counter Griddles		1
4516405	Label - Conversion Declaration		1
2127500	3/4" Regulator Propane 10" W.C.		1
Thermostatic Griddle *model* **GTGG__-GT__M (Kit Part# 4531368)**			
M8-52	#52 Orifice – Griddles (Tstat) – Pro	28,000	6
2200703	Pilot Orifice #23 Propane		6
4531371	Instructions Conversion Kit GTGGM Griddle, Nat/Propane		1
4516405	Label - Conversion Declaration		1
4531369	Label - Conversion Ratings, Propane		1
2127500	3/4" Regulator Propane 10" W.C.		1
Fixed & Adjustable Radiant Broiler (Kit Part# 4528888)			
M8-1.3MM	1.3Mm Orifice – Radiant Broiler – Pro	18,000	10
4528899	Instructions Conversion Kit Hd Counter Broilers – Nat/Propane		1
4528895	Label – Conversion Ratings Hd Counter Broilers		1
4516405	Label - Conversion Declaration		1
2127500	3/4" Regulator Propane 10" W.C.		1
Adjustable Charcoal Broiler (Kit Part# 4528890)			
M8-51	#51 Orifice – Ceramic Briquette Broiler Pro	30,000	6
4528899	Instructions Conversion Kit Hd Counter Broilers – Nat/Propane		1
4528895	Label – Conversion Ratings Hd Counter Broilers		1
4516405	Label - Conversion Declaration		1
2127500	3/4" Regulator Propane 10" W.C.		1

Gas Conversion Kits (*from Propane to Natural*)

PART #	KIT COMPONENTS	BTU/HR PER BURNER	QTY
Open Tops and Step-Up Open Tops (Kit part# 4528881)			
M8-36	#36 Orifice - Open Top Burners (All Models) - Nat	30,000	8
4528897	Instructions Conversion Kit Hd Hotplate – Nat/Propane		1
4528892	Label – Conversion Ratings Hd Hotplates		1
4516405	Label - Conversion Declaration		1
2127502	3/4" Regulator Natural 4½" W.C.		1
Hi/Low Griddle *model* **GTGG__-G__ (Kit Part# 4528883)**			
M8-37	#37 Orifice – Griddles (Hi-Lo Valve) - Nat	26,000	6
2200702	Pilot Orifice #32 Natural		6
4528898	Instructions Conversion Kit Hd Counter Griddles – Nat/Propane		1
4528894	Label – Conversion Ratings Hd Counter Griddles		1
4516405	Label - Conversion Declaration		1
2127502	3/4" Regulator Natural 4½" W.C.		1
Hi/Low Griddle *model* **GTGG__-G__M (Kit Part# 4531365)**			
M8-37	#37 Orifice – Griddles (Hi-Lo Valve) - Nat	27,000	6
2200702	Pilot Orifice #32 Natural		6
4531371	Instructions Conversion Kit GTGGM Griddle, Nat/Propane		1
4516405	Label - Conversion Declaration		1
4531370	Label - Conversion Ratings, Natural		1
2127502	3/4" Regulator Natural 4½" W.C.		1
Thermostatic Griddle *model* **GTGG__-GT__ (Kit Part# 4528885)**			
M8-36	#36 Orifice – Griddles (Tstat) – Nat	32,000	6
2200702	Pilot Orifice #32 Natural		6
4528898	Instructions Conversion Kit Hd Counter Griddles – Nat/Propane		1
4528894	Label – Conversion Ratings Hd Counter Griddles		1
4516405	Label - Conversion Declaration		1
2127502	3/4" Regulator Natural 4½" W.C.		1
Thermostatic Griddle *model* **GTGG__-GT__M (Kit Part# 4531367)**			
M8-33	#33 Orifice – Griddles (Tstat) – Nat	28,000	6
2200702	Pilot Orifice #32 Natural		6
4531371	Instructions Conversion Kit GTGGM Griddle, Nat/Propane		1
4516405	Label - Conversion Declaration		1
4531370	Label - Conversion Ratings, Natural		1
2127502	3/4" Regulator Natural 4½" W.C.		1
Fixed & Adjustable Radiant Broiler (Kit Part# 4528887)			
M8-45	#45 Orifice – Radiant Broiler - Nat	18,000	10
4528899	Instructions Conversion Kit Hd Counter Broilers – Nat/Propane		1
4528896	Label – Conversion Ratings Hd Counter Broilers		1
4516405	Label - Conversion Declaration		1
2127502	3/4" Regulator Natural 4½" W.C.		1
Adjustable Charcoal Broiler (Kit Part# 4528889)			
M8-36	#36 Orifice – Ceramic Briquette Broiler Nat	30,000	6
4528899	Instructions Conversion Kit Hd Counter Broilers – Nat/Propane		1
4528896	Label – Conversion Ratings Hd Counter Broilers		1
4516405	Label - Conversion Declaration		1
2127502	3/4" Regulator Natural 4½" W.C.		1

Bulletins & Revision History

Bulletins

BULLETIN #	SUBJECT	DATE
03-B-2010-SP	New Heavy Duty Gas Counter line	20-JULY-10
07-B-2010-S	Wire Link Rod Upgrade	26-OCT-10
GAR-01-11-AIC	Wire Link Rod & Lifting Bar Assembly Lock Upgrades	4-FEB-11
GAR-02-11-AIC	Correct Gas Connections for SIT Griddle Controls	25-MAR-11
GAR-05-11-AIC	Service Kit for Momentary Switch Part Numbers 4527834 & G03053-1	13-SEP-11
GAR-07-11-AIC	New SIT Griddle Control Thermostat Kit	30-SEP-11

Revision History

REV#	DESCRIPTION	DATE
0	New Service Manual released	20-AUG-10
1	Added new GT/UTGG__M models with GS Tstat.	18-MAR-13

Garland U.S. Range

GT/UT Series Heavy Duty Counter Equipment — Service Manual

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